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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,461	03/25/2004	Eiji Ishiyama	Q80447	4863

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EXAMINER
WANG, KENT F

ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/808,461	ISHIYAMA ET AL.	
	Examiner	Art Unit	
	Kent Wang	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 10/09/2007, have been entered and made of record. Claims 1-22 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3-5, 9-10, 13-14, 16, and 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Izumi (JP 10-224591) in view of Shaklee (US 6,166,825).

Regarding claim 1, Izumi discloses a print system (a picture communication system) having a printer controlling device (a digital camera 603, drawing 4) and a printer (a facsimile equipment 602, drawing 4), which performs printing on the basis of print data including a plurality of data segments inputted from said printer controlling device, said print system comprising:

- first communication means (a high speed data channel) for conducting high-speed radio data-communication (the transmission speed of 441.4kbps) between said printer controlling device (a digital camera 603) and said printer (a facsimile equipment 602), the predetermined data segment being transferred from said printer controlling device (a digital camera 603) to said printer (a facsimile equipment 602) by using said first communication means (transmitted from a digital camera 603 to a facsimile 602 via a high speed data channel) ([0046]-[0054], and [0064]-[0069]); and
- second communication means (a low speed data channel) for conducting low-speed radio data-communication (the transmission speed of 32kbps) between said printer controlling device (a digital camera 603) and said printer (a facsimile equipment 602), the other data segment being transferred from said printer controlling device (a digital camera 603) to said printer (a facsimile equipment 602) by using said second communication means (transmitted from a digital camera 603 to a facsimile 602 via a low speed data channel) ([0045], [0047]-[0054]).

Izumi does not disclose the predetermined data segment being transferred by the first communication means or the other data segment being transferred by the second communication means. However Shaklee discloses the predetermined data segment (printable pixel data) being transferred by the first communication means (high speed serial communication pathway) and the other data segment (control messages) being transferred by the second communication means (low speed serial communication pathway) between said

printer controlling device (a computer component 100, Fig 1) and said printer (a print engine component 300, Fig 3) (col. 8, lines 8-56).

Thus, it would have been obvious to one of ordinary skill in the art to have included the transmission means as taught by Shaklee into Izumi's picture communication system, as to make appropriate adjustments to control the print engine component and for transmitting desired data segment by two separate communication pathways (col. 2, lines 17-63, Shaklee).

Regarding claim 3, the limitations of claim 1 are taught above, Shaklee discloses the predetermined data segment concerns image data (printable pixel data) and the other data segment concerns setting data (control messages) for defining print conditions of said printer (col. 2, lines 22-34 and col. 8, lines 8-14).

Regarding claim 4, the limitations of claims 1 and 3 are taught above, Izumi discloses printer controlling device is a digital camera (a digital camera 603, drawing 6) for producing said image data by photographing a subject and for producing said print data by adding the print-setting data to the image data (adding the header according to a protocol to the image data) ([0058]).

Regarding claim 5, Izumi discloses a first communication means (a high speed data channel) is a pair of first radio interfaces (an ISDN interface section 708 and an ISDN circuit 709) for conducting said high-speed radio communication (the transmission speed of 441.4kbps), and said second communication means (a low speed data channel) is a pair of second radio interfaces (an ISDN interface section 708 and an ISDN circuit 709) for conducting said low-speed radio communication (the transmission speed of 32kbps) ([0040], [0058]).

Regarding claim 9, this claim differs from claim 1 only in that the claim 1 is a "print system" claim whereas claim 9 is a "printer" claim. Izumi a print system (a picture communication system) having a printer (a facsimile equipment 602, drawing 4). Thus the claim 9 is analyzed and rejected as previously discussed with respected to claim 1 above.

Regarding claims 10 and 14, these claims recite same limitations as claim 5. Thus they are analyzed and rejected as previously discussed with respect to claim 5 above.

Regarding claim 13, this claim differs from claim 1 only in that the claim 1 is a "print system" claim whereas claim 13 is a "printer controlling device" claim. Izumi a print system (a picture communication system) having a printer controlling device (a digital camera 603, drawing 4). Thus the claim 13 is analyzed and rejected as previously discussed with respected to claim 1 above.

Regarding claim 16, Izumi discloses the printer controlling device is a digital camera (a digital camera 603, drawing 4) ([0039]).

Regarding claim 20, Izumi discloses the first communication means (a high speed data channel) and said second communication means (a low speed data channel) are operable at frequencies less than 3 terahertz (the transmission speed of 441.4kbps and 32 kbps for first and second communication means, respectively) ([0039]).

Regarding claims 21 and 22, these claims recite same limitations as claim 20. Thus they are analyzed and rejected as previously discussed with respect to claim 20 above.

5. Claims 2, 12, 15, and 17-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Izumi in view of Ozawa (US 2003/0016378).

Regarding claim 2, the limitations of claim 1 are taught above, Ozawa discloses communication means is turned off (stop power supply, S1316 , Fig 28) when the data communication of the predetermined data segment (the date data stored in correspondence with the image data) is not conducted ([0159]-[0161], Ozawa).

Thus, it would have been obvious to one of ordinary skill in the art to have included the power switch devices as taught by Ozawa into Izumi's picture communication system, as to stop power supply to the to the communication system when the transmission of image data is not conducted ([0161], Ozawa).

Regarding claim 12, Ozawa discloses print-setting data of print data includes information concerning a print size (paper size), an image-quality mode (color matching mode) and a printing direction (see Fig. 12, steps S72 and S74, and also [0084], [0078], and [0079], Ozawa).

Thus, it would have been obvious to one of ordinary skill in the art to have included the print-setting data of print data as taught by Ozawa into Izumi's picture communication system, as to allow a printing apparatus to print an image sensed by a digital camera without requiring any complicated operation ([0011], Ozawa).

Regarding claim 15, this claim recites same limitations as claim 12. Thus it is analyzed and rejected as previously discussed with respect to claim 12 above.

Regarding claims 17, 18, and 19, these claims recite same limitations as claim 2. Thus they are analyzed and rejected as previously discussed with respect to claim 2 above.

6. Claims 6-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Izumi in'view of Otsuka (US 2002/0140963).

Regarding claim 6, the limitations of claims 1-5 are taught above, Izumi does not disclose the first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth.

However, Otsuka discloses a print system first communication means is based on a standard of IEEE 802.11a or 11b, and said second communication means is based on a standard of IEEE 802.11b or Bluetooth (Otsuka, [0133]).

Izumi and Otsuka are analogous art because they are from the same field of data communication between printer controlling device and printer. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Otsuka's wireless communication in Izumi's image processing system. The suggestion/motivation would have been to enable the printer has a communication system according to IEEE 802.11 or Bluetooth (Otsuka, [0068]).

Regarding claim 7, this claim recites same limitations as claim 6. Thus it is analyzed and rejected as previously discussed with respect to claim 6 above.

7. Claims 8 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Izumi in view of Omura (US 6,999,113).

Regarding claim 8, Izumi discloses a print system having a printer controlling device and a printer, which performs printing on the basis of print data including a plurality of data segments inputted from printer controlling device. Izumi does not disclose the printer has a

battery as a power source so as to be portable. However Omura discloses a printer has a battery as a power source so as to be portable (battery chamber lid 22 and battery pack 24) (Omura, col. 4, lines 12-16).

Izumi and Omura are analogous art because they are from the same field of printer for outputting image data. At the time of the invention, it would have been obvious to a person of the ordinary skill in the art to use Omura's battery chamber and battery pack in Izumi's printer. The suggestion/motivation would have been to enable the printer has a capability to connect to some external apparatuses for exchanging image data from each other. It is also possible to power the portable instant printer from the net through an AC adapter or the like (Omura, col. 4, lines 12-17).

Regarding claim 11, this claim recites same limitations as claim 8. Thus it is analyzed and rejected as previously discussed with respect to claim 8 above.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Szabelski (US 2004/0168001) disclose a method and apparatus for implementing multiple transaction translators that share a single memory in a serial hub.
- Ozawa et al. (US 6,115,137) disclose an image processing system which allows a digital camera to transmit image data to a printing apparatus without the intervention of any computer.

- Yoshida et al. (US 6,690,417) disclose a method for processing images comprising the steps of performing the reception of data through a network and intervening between the operations of the reception step and the input step in accordance with the storage management in the controlling step.
- Niida et al. (US 6,996,096) discloses a communication apparatus having first communication device conformed to a first communication standard and second communication device conformed to a second communication standard different from the first communication standard.
- Parulski et al. (US 7,038,714) discloses a digital camera system comprises an interface arrangement for connecting a digital camera including an image display to a printer.

Inquiries

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information

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KW/YA
21 December 2007

NGOC-YEN VU
SUPERVISORY PATENT EXAMINER